

1 What is claimed is:

- 2 1. An assembly for removably supporting cargo on the exterior
3 of a vehicle, said assembly comprising:
4 a) a base connected to a hitch structure on the vehicle
5 and including a support assembly secured to said base,
6 b) a hoist including a winch and a cable connected in
7 driven relation to said winch, said cable connected
8 directly to the cargo,
9 c) said hoist assembly further including a stanchion and
10 a boom, said boom adjustably positionable a spaced
11 distance from said stanchion,
12 d) said boom and said stanchion collectively and at least
13 partially defining a path of travel of said cable
14 between said winch and the cargo,
15 e) said support assembly comprising a load support
16 portion disposed in interconnected relation to the
17 hitch structure, and
18 f) said spaced distance of said boom relative to said
19 stanchion determinative of a proximity of the cargo
20 relative to said load support portion.
- 21 2. An assembly as recited in claim 1 wherein said cable is
22 connected to said cargo at a predetermined connecting
23 point, said connecting point disposed in substantially
24 aligned relation to a center of gravity of the cargo.
- 25 3. An assembly as recited in claim 1 wherein said boom is
26 adjustably positionable relative to the cargo.

- 1 4. An assembly as recited in claim 1 wherein said support
2 assembly further comprises a stanchion support portion
3 secured to said base in interconnected relation to the
4 hitch structure on the vehicle.
- 5 5. An assembly as recited in claim 4 wherein said load support
6 portion and said stanchion support portion are fixedly
7 secured to said base and removable with said base from the
8 hitch structure.
- 9 6. An assembly as recited in claim 1 wherein said load support
10 portion comprises at least one retaining member secured in
11 outwardly spaced relation to a remainder of said support
12 assembly, said retaining member disposed and structured to
13 removably retain the cargo on said support assembly.
- 14 7. An assembly as recited in claim 1 wherein said boom
15 comprises an arm segment movably connected to a remainder
16 of said boom and longitudinally positionable relative
17 thereto so as to selectively vary the length of said boom
18 and the position of the cargo relative to said support
19 assembly at least when the cargo is not retained on said
20 support assembly.
- 21 8. An assembly as recited in claim 1 wherein said support
22 assembly is structured to concurrently support the cargo
23 and the hoist assembly on the exterior of the vehicle in
24 interconnected relation to the hitch structure.
- 25 9. An assembly as recited in claim 8 wherein said load support
26 portion is secured to said base and structured to removably

support the cargo on the vehicle.

10. An assembly as recited in claim 9 wherein said boom is selectively positionable relative to said support assembly so as to facilitate retaining engagement of the cargo with said load support portion as the cargo is lifted from a supporting surface by said cable.

11. An assembly as recited in claim 10 wherein said load support portion comprises a mounting plate and at least one retaining member secured to said mounting plate and disposed in outwardly spaced relation thereto, said mounting plate and said retaining member cooperatively structured and disposed to removably support the cargo on said support assembly.

12. An assembly as recited in claim 11 wherein said load support portion and said stanchion support portion are fixedly secured to said base and concurrently removable with said base from the hitch structure.

13. An assembly for removably supporting cargo on an exterior of a vehicle, said assembly comprising:

- a) a base connected to a hitch structure on the vehicle and including a support assembly secured to said base,
- b) said hoist including a winch and a cable connected in driven relation to said winch,
- c) a load comprising a mobile carrier structured to support the cargo thereon,
- d) said hoist assembly further including a boom extending

- 1 outwardly from said support assembly,
- 2 e) said boom at least partially defining a path of travel
- 3 of said cable between said winch and said load,
- 4 f) said support assembly including a load support portion
- 5 disposed in an inclined orientation and structured to
- 6 support said mobile carrier in a substantially
- 7 corresponding inclined orientation on the exterior of
- 8 the vehicle in interconnected relation to the hitch
- 9 structure, and
- 10 g) said cable connected to said mobile carrier at a
- 11 predetermined location thereon which facilitates
- 12 support of said load in said corresponding inclined
- 13 orientation when said mobile carrier is lifted from a
- 14 supporting surface.

15 14. An assembly as recited in claim 13 wherein said boom is

16 adjustably positionable relative to said support assembly.

17 15. An assembly as recited in claim 13 wherein said load

18 support portion is secured to said base in interconnected

19 relation to the hitch structure on the vehicle.

20 16. An assembly as recited in claim 15 wherein said load

21 support portion is fixedly secured to said base and

22 removable with said base from the hitch structure.

23 17. An assembly as recited in claim 15 wherein said load

24 support portion comprises at least one retaining member

25 extending outwardly therefrom in retaining relation to said

26 mobile carrier, said retaining member cooperatively

1 disposed and structured to removably retain said mobile
2 carrier in said corresponding inclined orientation.

3 18. An assembly as recited in claim 16 wherein said load
4 support portion comprises a guide assembly disposable in at
5 least partially supporting engagement with said mobile
6 carrier.

7 19. An assembly as recited in claim 18 wherein said guide
8 assembly is disposed in said inclined orientation and is
9 structured to engage said mobile carrier upon activation of
10 said winch as said load is lifted from a supporting surface
11 into retaining engagement with said load support portion.

12 20. An assembly as recited in claim 19 wherein said boom is
13 selectively positionable relative to said support assembly
14 so as to facilitate interruptive, slidable engagement of
15 said guide assembly with said mobile carrier as said load
16 is lifted from a supporting surface into retaining
17 engagement with said load support portion by said cable.

18 21. An assembly as recited in claim 20 wherein said boom
19 comprises an arm segment movably connected to a remainder
20 of said boom and longitudinally positionable relative
21 thereto so as to selectively vary a position of said boom
22 and said path of travel of said cable relative to said load
23 and said load support portion.

24 22. An assembly for removably supporting cargo on an exterior
25 of a vehicle, said assembly comprising:

26 a) a base connected to a hitch structure on the vehicle

- 1 and including a support assembly secured to said base,
- 2 b) a hoist including a winch and a cable connected in
- 3 driven relation to said winch,
- 4 c) said hoist further including a boom extending
- 5 outwardly from said support assembly and at least
- 6 partially defining a path of travel of said cable
- 7 between said winch and the cargo,
- 8 d) said support assembly including a load support portion
- 9 disposed and structured to support cargo in a
- 10 predetermined orientation on the exterior of the
- 11 vehicle in interconnected relation to the hitch
- 12 structure, and
- 13 e) said cable connected in supporting relation to the
- 14 cargo at a location which facilitates disposition of
- 15 said cargo in said predetermined orientation when the
- 16 cargo is lifted from a supporting surface upon
- 17 activation of said winch.

18 23. An assembly as recited in claim 22 further comprising a
19 load including a mobile carrier structured to support the
20 cargo thereon, said load support portion disposed in an
21 inclined orientation substantially defining said
22 predetermined orientation of the cargo.

23 24. An assembly as recited in claim 23 wherein said load
24 support portion comprises a guide assembly disposed in said
25 inclined orientation and structured to movably and at least
26 partially support said mobile carrier upon activation of

1 said winch as said load is lifted from a supporting surface
2 into retaining engagement with said load support portion.

3 25. An assembly as recited in claim 22 wherein said hoist
4 further includes a stanchion connected to said boom, said
5 boom and said stanchion collectively and at least partially
6 defining said path of travel of said cable connected
7 directly to the cargo at a location thereon which
8 facilitates orientation of said cable in a substantially
9 aligned relation to a center of gravity of the cargo, at
10 least when said cargo is not supported on said support
11 assembly.

12 26. An assembly as recited in claim 25 wherein said support
13 assembly comprises a cargo engaging portion having at least
14 one retaining member secured in outwardly spaced relation
15 to a remainder of said support assembly, said retaining
16 member disposed and structured to removably retain the
17 cargo on said support assembly.

18 27. An assembly as recited in claim 26 wherein said load
19 support portion further comprises a cargo support portion
20 secured to said base and structured to removably support
21 the cargo on the vehicle.

22 28. An assembly as recited in claim 22 wherein said boom
23 comprises an arm segment movably connected to a remainder
24 of said boom and longitudinally positionable relative
25 thereto so as to selectively vary the length of said boom
26 and the position of said cable and the cargo relative to

1 said support assembly.